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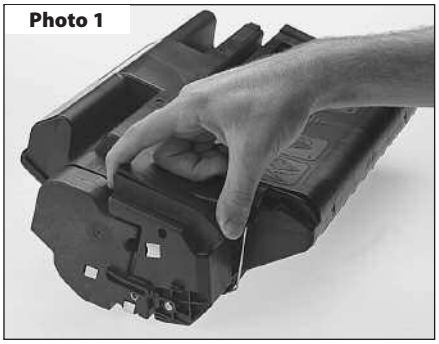
Canon LBP-2460
Data Products DD524
HP 5Si, 5Si MX, 5Si Mopier
IBM Network Printer 24
Lexmark Optra N Model 240
QMS 2425-2425 EX
Troy 524

Part Number: C3909A
Gram Load: 840 grams
Yield @ 5%: 15,000 pgs
Pages/Min.: 24ppm
Resolution: 600 dpi

Needle Nose Pliers
Small Flat Blade Screwdriver
#2 Phillips Head Screwdriver
Small Hammer
Soft Lint-Free Cloth/ Damp Cloth
5/32" Drift Punch
Anhydrous Isopropyl Alcohol
800gms 5Si Toner
Nu-Finish (optional)
Damp Cloth

Photo 1

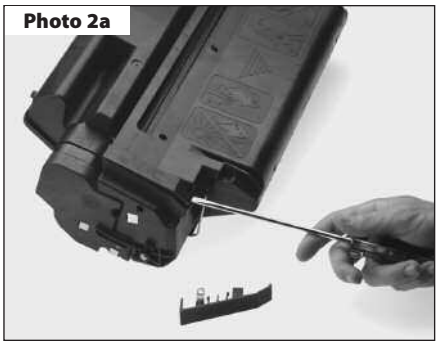


Step 1

Locate and remove the cartridge clips on both sides of the cartridge using your finger. Gently pry up on the clip until it pops up.

(See Photo 1)

Photo 2a



Step 2

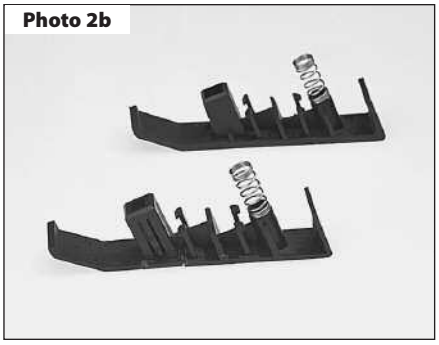
Using a flat blade screwdriver, pry up on the other clip and remove it.

(See Photo 2a)

NOTE: It is very likely that these clips will break while they are being removed. If these break, replace with aftermarket part. You may need to use the springs from the OEM clip.

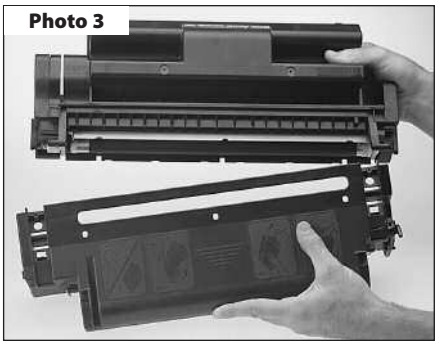
(See Photo 2b)

Photo 2b



Notes

Photo 3

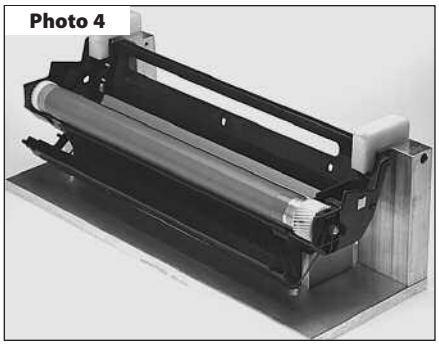


Step 3

Just like the HP4 cartridge, the two halves of the cartridge can now be separated.

(See Photo 3)

Photo 4

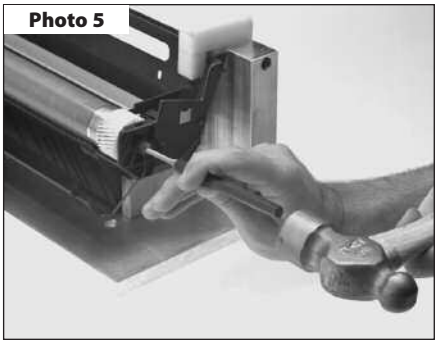


Step 4

Set the hopper aside. If you have a waste hopper fixture, set the waste hopper in the fixture. If not, place the waste hopper on the table.

(See Photo 4)

Photo 5

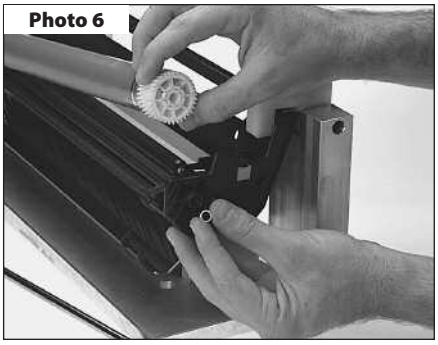


Step 5

The drum axle is a metal rod that goes through the center of the drum end to end. On the large gear end of the axle is a small white plastic retaining ring. Using a drift punch and a hammer, tap directly on the shaft (large gear side) and drive it out the other end. *(See Photo 5)*

NOTE: Make sure you don't lose the retaining ring. The ring fits into a groove on the drum shaft to hold the shaft in position. Repeated removal will wear this ring and the ring will no longer snap into position. If the ring does not snap, replace it.

Photo 6

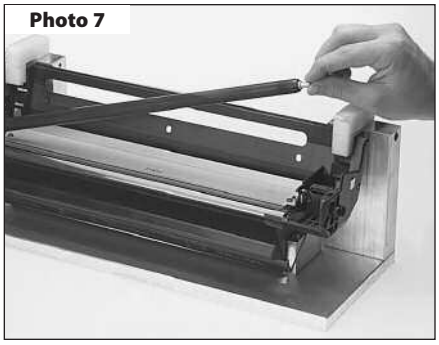


Step 6

Remove the drum, blow off excess toner with compressed air and clean with isopropyl alcohol. Wrap the drum in a protective paper or cloth and set it aside in a dark, protected place. *(See Photo 6)*

NOTE: We were able to use the OEM drum once after the Oem cycle with no loss in density, however, you may choose to recoat or replace the drum after the first recharge.

Photo 7



Step 7

Remove the primary charge roller from its clips. Clean clips with isopropyl alcohol and a cotton swab. Inspect the primary charge roller for damage. Clean the primary charge roller with a mild soap and water and set it aside.

(See Photo 7)

NOTE: We have had no problems using the OEM primary charge roller three cycles in mild weather climates.

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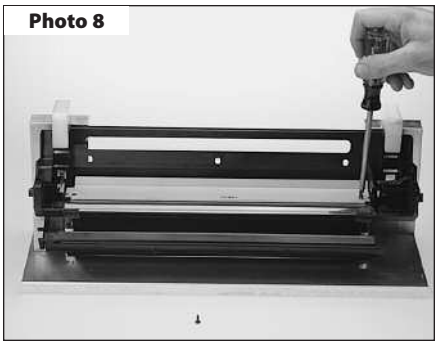
FUTURE GRAPHICS

Photo 8

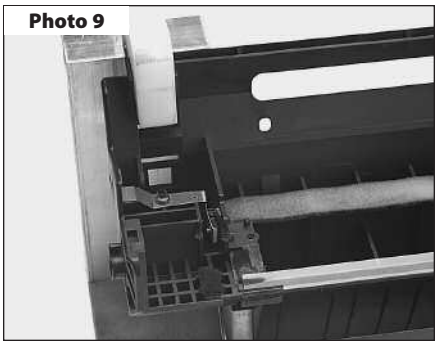


Step 8

Remove the two Phillips head screws holding the wiper blade and remove the blade. Be careful not to break the plastic positioning posts.

(See Photo 8)

Photo 9



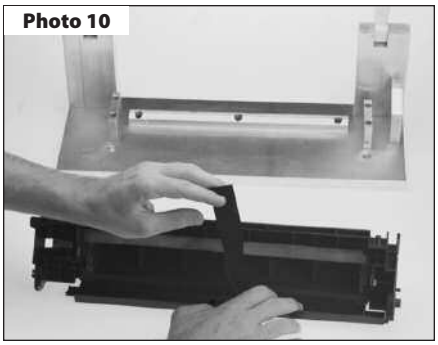
Step 9

Empty out the waste toner and clean felts and foam with a vacuum or compressed air.

(See Photo 9)

NOTE: Be careful not to damage felts, foam or the mylar recovery blade, as this can cause leaks. If the felts or foam are damaged or worn, replace.

Photo 10



Step 10

Apply OPC protector felt to the drum shutter door. You will need to remove the cartridge from the fixture.

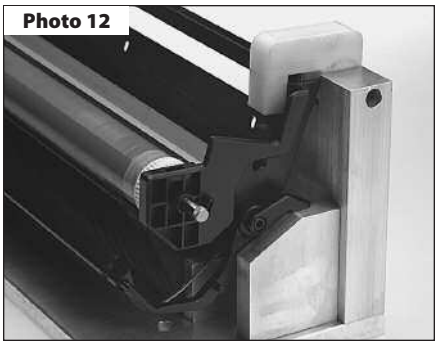
(See Photo10)

Step 11

Apply padding powder on wiper blade and reinstall.

NOTE: If you are going to use a new aftermarket drum, always replace wiper blade.

Photo 12



Step 12

Apply padding powder to the OPC drum and install. The big helical gear will go on the right side of the waste hopper. Install the drum axle only far enough to hold the drum against the wiper blade. Rotate drum so the wiper blade wipes the padding powder off the drum.

(See Photo12)

Step 13

Once again, remove the drum axle and the drum. Reinstall the primary charge roller then reinstall the drum and drum axle.

NOTE: When reinstalling the drum axle, the axle slides through the drum from the left side. Make sure you install the axle in the right way. The notched end of the axle goes on the large gear end.

Notes

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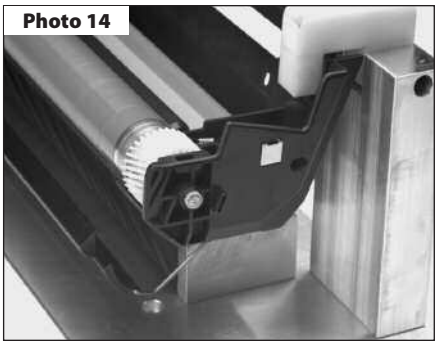
Notes

Photo 14



Step 14

Install the retaining ring.

(See Photo 14)

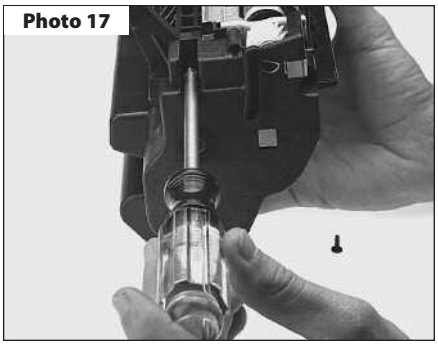
Step 15

Set waste hopper aside and cover.

Step 16

If you have a toner hopper fixture, place toner hopper in fixture or place toner hopper on the workbench.

Photo 17

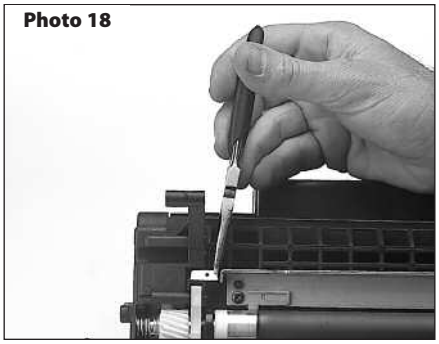


Step 17

Remove the two screws holding the end cap on the gear side of the toner hopper.

(See Photo 17)

Photo 18

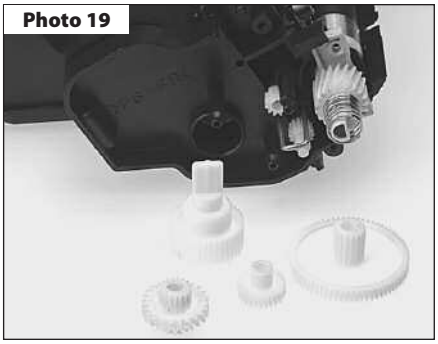


Step 18

Before removing the end cap, lift the bias strip off its positioning post next to the doctor blade.

(See Photo 18)

Photo 19

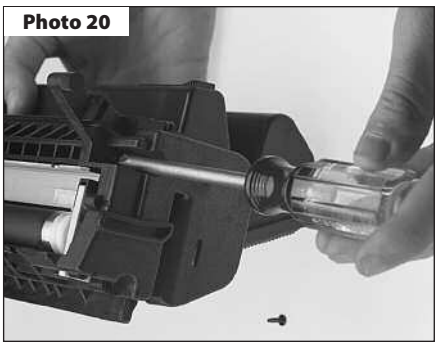


Step 19

Slide the end cap off. Note the position of the white gears, then remove the four largest ones and set them aside.

(See Photo 19)

Photo 20



Step 20

Turn the cartridge around. Remove the two screws that hold the other end cap on and remove.

(See Photo 20)

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FUTURE GRAPHICS

Photo 21a

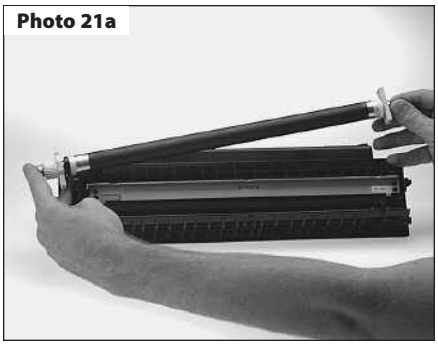
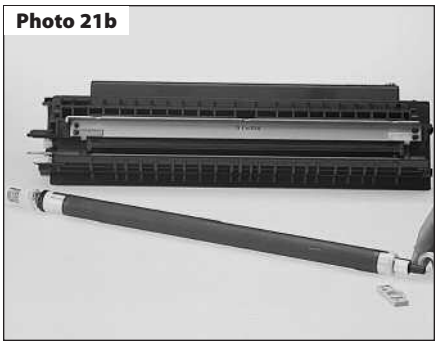


Photo 21b



Step 21

Lift out mag roller. Remove the mag roller stabilizer, mag roller sleeve bearing and mag roller sleeve bushing from the non-gear side of the mag roller and clean.

(See Photo 21a and 21b)

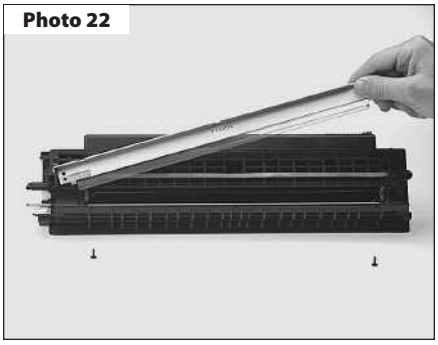
Use compressed air or a vacuum and remove the extra toner off the mag roller. Use mag roller cleaner to remove any residue built up on mag roller.

NOTE: If you are going to have your mag rollers coated or replaced, you'll need to remove the mag roller contact, the gear, mag roller stabilizer, the bearing and the bushing from the other side of the mag roller.

To remove the gear off the mag roller, use a very small flat blade screwdriver to pry back the prong on the gear. Remove the non-gear side hub and send in mag roller to be coated.

The mag roller bearings have a difference in the inner diameter size and are not interchangeable. HP also made two different mag rollers. The only difference is in the length of the shaft and the hub. It is very important to keep the parts together. The long shaft uses a shorter hub. When the mag rollers are put together correctly, they can be used interchangeably in different cartridges.

Photo 22

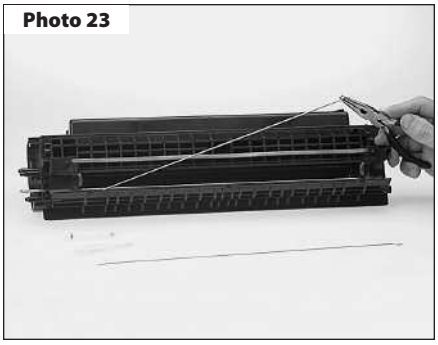


Step 22

Remove the two screws that hold the doctor blade and lift it out. Clean and set aside. The doctor blade can wear out after a few cycles, check and replace if necessary.

(See Photo 22)

Photo 23



Step 23

Turn the cartridge around to the gear side once again. Remove the two other gears. Remember which gear goes where. These gears turn the toner paddle bars inside the toner hopper. The bars will fall into the toner hopper. Remove these toner paddle bars from inside the toner hopper. *(See Photo 23)*

Notes

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Notes

Photo 24

Step 24

The bars are the same so don't worry about getting them mixed up. Also, remove the toner paddle bar felt washers. Look at the washers to make sure toner is not leaking through them. After a few cycles, these felt washers will wear out and need to be replaced.

(See Photo 24)

Photo 25

Step 25

Remove toner sensing bar. Make sure you don't lose the toner sensor bar seal. Clean the sensor bar with a cloth and alcohol.

NOTE: Do not bend the sensor bar.

(See Photo 25)

Photo 26

Step 26

Remove leftover toner and clean the felts and foam seals with compressed air or vacuum. Be careful not to damage any of the foam, felt strips, or the thin mylar strip on the bottom lip of the toner hopper. If these are damaged, the cartridge will leak.

(See Photo 26)

Photo 27

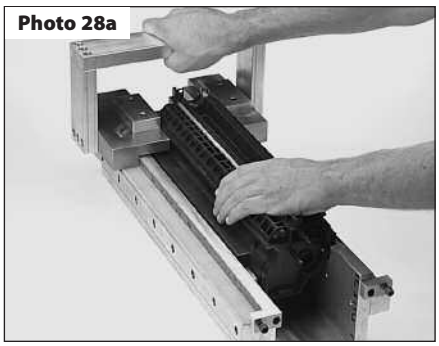
Step 27

At this point, if you are not going to seal this cartridge, you can fill it with toner now through the mag roller opening then start reassembling cartridge.

(See Photo 27)

If you wish to split and seal the toner hopper first, proceed to the next step.

Photo 28a



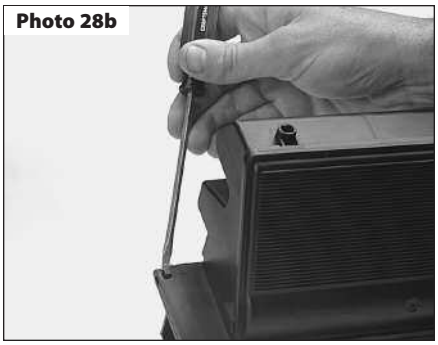
Step 28

Place cartridge in splitter fixture. Hold cartridge in place and slide cutting unit along the guide to ensure a good clean split.

(See Photo 28a)

FUTURE GRAPHICS

Photo 28b

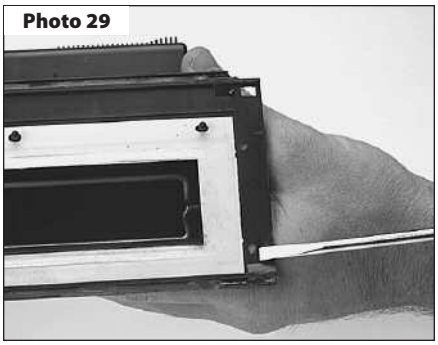


Step 28 cont.

NOTE: The two halves of the toner hopper are still held together by two pins. Carefully pull the two halves apart.

(See Photo 28b)

Photo 29

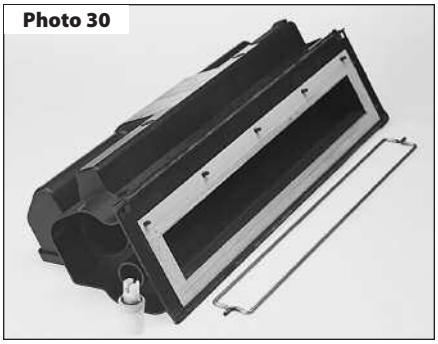


Step 29

Use a razor knife to cut off plastic posts at the base on the non-plug side of the cartridge. These are removed so a seal can be used.

(See Photo 29)

Photo 30

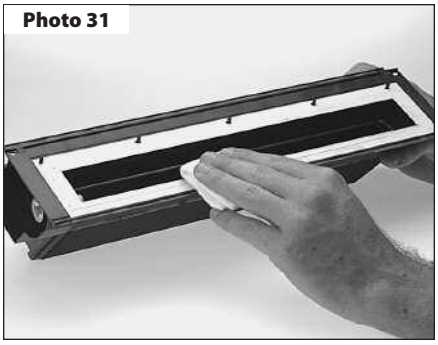


Step 30

Using needle nose pliers, pinch the retaining clips of the agitator, and remove the agitator drive assembly. Remove the toner agitator felt washer. If toner is leaking through opening, replace the washer.

(See Photo 30)

Photo 31

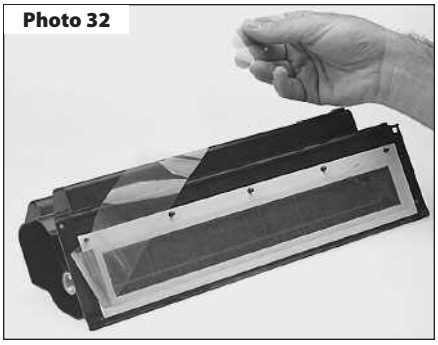


Step 31

Use isopropyl alcohol and clean surface of toner hopper where cartridge was split.

(See Photo 31)

Photo 32



Step 32

Remove backing from the seal. With the tail of the seal on the left side of the cartridge (the plug side), adhere seal to the toner hopper.

(See Photo 32)

NOTE: Use your finger to press around the seal to make sure of a good adhesion.

Notes

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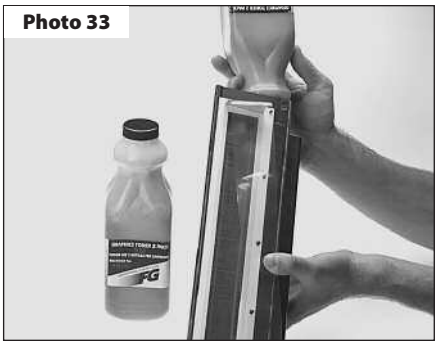
Notes

Photo 33

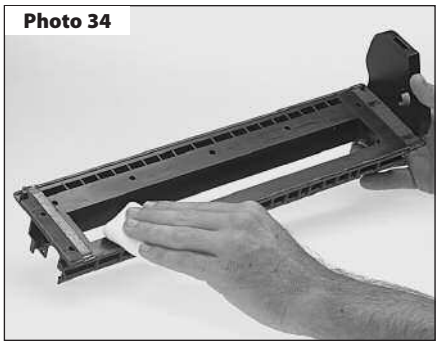


Step 33

Remove fill plug and fill with toner.

(See Photo 33)

Photo 34



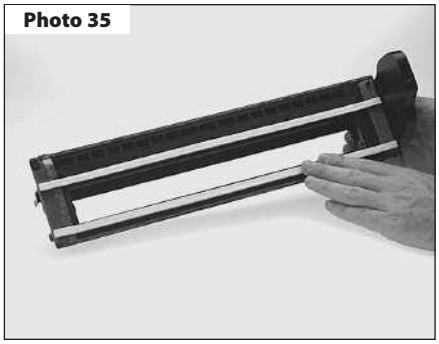
Step 34

Use compressed air or a vacuum and clean the toner hopper seal channel end foam on the back of the mag roller section. Wipe off the back of the mag roller section.

(See Photo 34)

NOTE: If these foam pads are damaged, they need to be replaced.

Photo 35

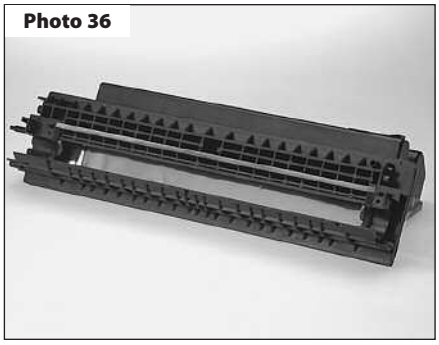


Step 35

These foam strips stop the cartridge from leaking after it has been split. The foam strips are applied right across the seal channel end foam.

(See Photo 35)

Photo 36



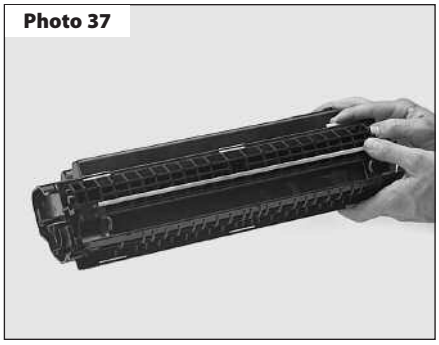
Step 36

Fold the seal back across the toner hopper. Now re-join the mag roller section and the toner hopper section.

(See Photo 36)

NOTE: The posts on the mag roller section needs to fit back into the holes on the toner hopper section.

Photo 37



Step 37

Using the toner hopper clips, clip the two sections together.

(See Photo 37)

FUTURE GRAPHICS

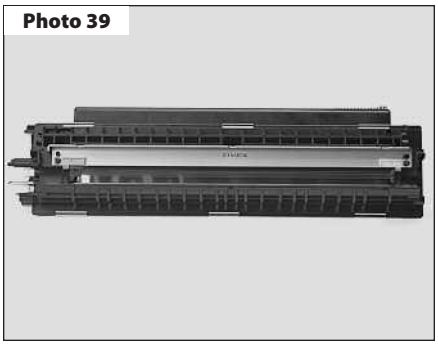
Photo 38

Step 38

Reinstall the toner paddle bar felts and the bar gears that hold them in. Then install toner sensor bar.

(See Photo 38)

Photo 39

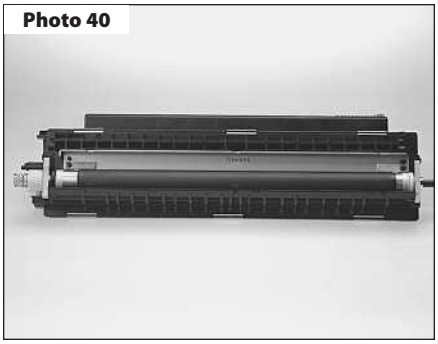


Step 39

Put a little fresh toner on the doctor blade and reinstall.

(See Photo 39)

Photo 40

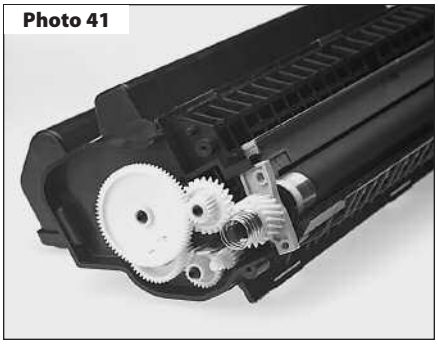


Step 40

Place the mag roller bushing, mag roller bearing, and the mag roller stabilizer back on the mag roller. Install mag roller back onto toner hopper.

(See Photo 40)

Photo 41

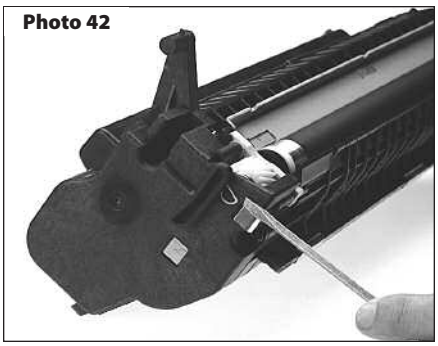


Step 41

Reinstall all the gears on the toner hopper.

(See Photo 41)

Photo 42



Step 42

Now install the gear side end cap, aligning the "flat sided shaft" of the magnet with its "D" shaped hole and the positioning pins through the mag roller stabilizer holes and then press down. Install two Phillips head screws. Align the metal bias strap to the plastic pin next to the doctor blade and press into position so that it contacts the doctor blade.

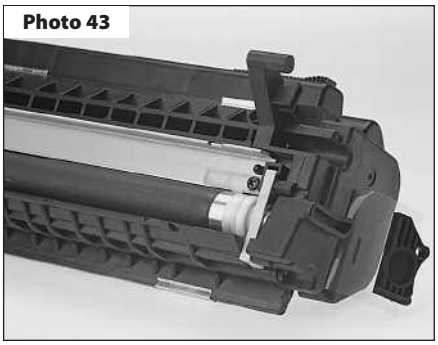
(See Photo 42)

Notes

Need help with a particular remanufacturing problem?
Call the Technical Resource Center from 8am - 5pm PST: 800 394.9900

Notes

Photo 43



Step 43

Do the same with the end cap on the other side and apply pull tab to seal.

(See Photo 43)

Step 44

Align the toner hopper and waste hopper assemblies together.

Photo 45

Step 45

Snap the OEM or aftermarket cartridge clip back into position.

(See Photo 45)

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